

Title (en)
OIL LUBRICATION MECHANISM FOR FRONT BEARING OF WATER-COOLED MOTOR AND MOTOR DRIVING ASSEMBLY

Title (de)
ÖLSCHMIERMECHANISMUS FÜR EIN VORDERES LAGER EINES WASSERGEKÜHLTEN MOTORS UND MOTORANTRIEBSVORRICHTUNG

Title (fr)
MÉCANISME DE LUBRIFICATION À L'HUILE POUR PALIER AVANT DE MOTEUR REFROIDI À L'EAU, ET ENSEMBLE D'ENTRAÎNEMENT DE MOTEUR

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Application
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Abstract (en)
[origin: EP3892892A1] The present disclosure discloses an oil-lubrication mechanism for a fore bearing of a water-cooled electric motor (1) and an electric-motor driving assembly, which solves the problems of conventional grease lubrication of the fore bearing of water-cooled electric motors (1) such as serious bearing heat generation and bearing failure and low life caused by easy outflowing of the grease. The oil-lubrication mechanism includes a gear-splashing oil-storage structure provided in a gearbox or a reduction gearbox, and a bearing-baffle oil-storage structure provided at a front end of the water-cooled electric motor; and a gear in the gearbox or the reduction gearbox in operation throws a lubricating oil into the gear-splashing oil-storage structure, and the lubricating oil is delivered via the oil conduit (9) into the bearing-baffle oil-storage structure, thereby lubricating the fore bearing of the water-cooled electric motor, and subsequently the lubricating oil flows back into the gearbox or the reduction gearbox via the oil return tube (3). In the present disclosure, the lubricating oil that splashes inside the gearbox or the reduction gearbox is introduced into the fore bearing of the water-cooled electric motor (1), which enables the fore bearing of the water-cooled electric motor to be lubricated by the oil, thereby reducing the heat generation of the fore bearing of the water-cooled electric motor (1), and improving the life of the fore bearing and the reliability of the electric motor.

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• [A] FR 2740853 A1 19970509 - PEUGEOT [FR]
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• See also references of WO 2020125514A1

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EP4166818A1; FR3128165A1; DE102022125100A1

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